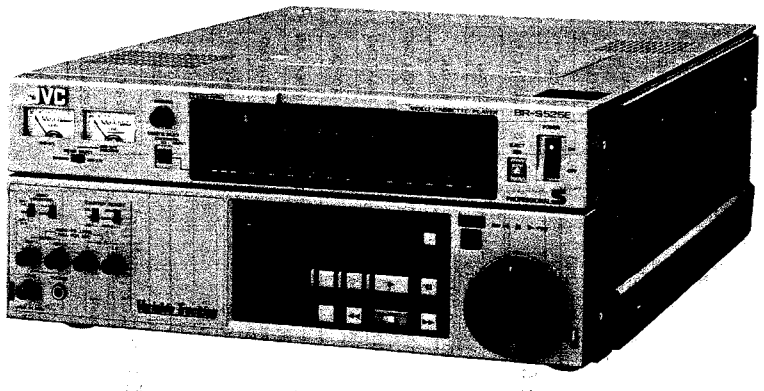
INSTRUCTIONS

JVC

BR-S525E

VIDEO CASSETTE PLAYER
VIDEOKASSETTENPLAYER
LECTEUR DE CASSETTE VIDEO

S-VHS 625 VHS PAL S-VHS C 625 VHS PAL Variable Tracking Hi-Fi



PGD 30002-301

SAFETY PRECAUTIONS

Warning Notice
FOR YOUR SAFETY (Australia)

1. Insert this plug only into effectively earthed three-pin power outlet.
2. If any doubt exists regarding the earthing, consult a qualified electrician.
3. Extension cord, if used, must be three-core correctly wired.

IMPORTANT (In the United Kingdom)
Mains Supply (AC 240 V~)
WARNING - THIS APPARATUS MUST BE EARTHED

The wires in this mains lead are coloured in accordance with the following code;

GREEN-and-YELLOW:	EARTH
BLUE:	NEUTRAL
BROWN:	LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.
The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked with the letter E or by the safety earth symbol ⏚ or coloured GREEN or GREEN-AND-YELLOW. The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or which is coloured BLACK. The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

POWER SYSTEM
Connection to the mains supply
The operating voltage of this set is preset to 220 – 240 V~ at the factory.
Before connecting to mains, check that the voltage selector on the rear panel is set to the same voltage as your local mains supply.
Adapting to local power line
This set operates on 110 – 127 V/220 – 240 V~ AC, 50/60 Hz.
If the preset voltage is different from the power line voltage in your area, reset the voltage selector by inserting a screwdriver into the slot of the voltage selector and turning it until the correct voltage is displayed.

This unit is produced to comply with Directives 76/889/EEC, 82/499/EEC, 87/308/EEC, and IEC Publ.65.

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION
To prevent electric shock, do not open the cabinet. No user serviceable parts inside. Refer servicing to qualified service personnel.

Note:
The rating plate and the safety caution are on the rear of the unit.

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HOW TO USE THIS MANUAL

This manual introduces you to the BR-S525E S-VHS Player and shows you how to make the most of its many advanced features. Because the manual is written for the person who has some experience in videotape recording and is familiar with the terms and techniques described, explanations and definitions are kept to a minimum.

Also, some functions are available only when the corresponding optional boards are plugged in. Whenever these functions are referred to in the text, it is assumed that the corresponding boards have been installed.

- TC functions are available only when the optional SA-R22E Time Code Reader/Generator board is installed.
- Y/C686/924 Output is available only when the optional SA-E92E Output board is installed.

IMPORTANT

Instructions for all operations are based on the setup menu's initial settings unless otherwise specified. We recommend that you familiarise yourself with the available settings before operating the VCR. For more information, please refer to "Setup Menu", ☞ p.23

PREPARATIONS

VCR

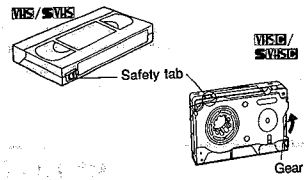
- Avoid using the unit in places subject to the following conditions:
  – extreme heat, cold, or humidity,
  – dust,
  – vibrations, and
  – poor ventilation.
- Be careful of moisture condensation.
  Do not use the unit immediately after moving it from a cold place to a warm place. The water vapor in warm air will condense on the still-cold video head drum and tape guides and may cause damage to the tape and the unit.
- Handle the unit carefully.
  - Do not block the ventilation openings.
  - Do not place anything heavy on the unit.
  - Do not place anything which might spill on the top cover of the unit.
  - Use in horizontal (flat) position only.
- During transportation,
  - Avoid violent shocks to the unit during packing and transportation.
  - Before packing, be sure to remove the cassette from the unit.

VIDEO CASSETTES

This player uses S-VHS, S-VHS-C, VHS, and VHS-C cassettes. Only cassettes recorded in the standard play (SP) mode can be played on this player.

S-VHS: SE-180 for 180 minutes, SE-120 for 120 minutes, SE-60 for 60 minutes, and SE-30 for 30 minutes of playback.
S-VHS-C: SE-C30 for 30 minutes of playback.
VHS: E-180 for 180 minutes, E-120 for 120 minutes, E-90 for 90 minutes, E-60 for 60 minutes, and E-30 for 30 minutes of playback.
VHS-C: EC-30 for 30 minutes of playback.

- Before loading a compact cassette, be sure the tape is not slack. If there is any slack, turn the gear on the cassette in the direction of the arrow to take up the slack.
- Avoid exposing the cassettes to direct sunlight. Keep them away from heaters.
- Avoid extreme humidity, violent vibrations or shocks, strong magnetic fields (near a motor, transformer or magnet), and dusty places.
- Place the cassettes in cassette cases and position vertically.



FEATURES

High-quality variable-speed playback and programmable playback
Developed especially for PROFESSIONAL S, JVC's advanced new Automatic Variable Tracking system offers better head-to-tape contact, greater accuracy, and higher resonance frequency than comparable systems. The result is clear, noiseless variable-speed playback at speeds from –2 to +3 times normal. In combination with the BR-S822E Editing Recorder, this system makes possible high-quality slow-motion or reverse edits with instant, jitter-free starts from still frames. Programmable playback is also featured. Using this function, playback time can be compressed and expanded in steps of 0.1 % over a range of ±20 %.

Field-by-field playback
Unlike other S-VHS players which skip every other field in the search/frame advance modes, the BR-S525E's double-azimuth variable tracking heads ensure that every field is displayed in the variable speed mode. This is invaluable in scientific and medical imaging, as well as in sports applications where field-by-field analysis is required.

Built-in TBC
The BR-S525E incorporates an advanced digital time base corrector with full-field memory capacity to eliminate timebase errors across the widest range. COMPONENT OUT connectors are provided for direct transmission of the component signal to M-II or BETACAM SP* equipment. Composite and Y/C 443 outputs are also provided.
* BETACAM SP is a trademark of Sony Corporation.

Built-in Digital Noise Reducer
The BR-S525E incorporates a high-performance digital noise reduction board which processes the digitised signals in the TBC to minimise after image and boost the S/N ratio. For luminance signal noise reduction, this DNR uses vector motion detection and compensation circuitry with an Hadamard frame recursive noise reduction circuit. A powerful non-linear noise reduction circuit and a field correlated recursive noise reduction circuit provide highly effective chroma noise reduction. The result is superior image quality with minimal picture degradation — ideal for on-air and large-screen display applications.

Newly-developed full-size/compact-compatible cassette loading mechanism
Similar in principle to the loading mechanisms employed in M-II, 3/4-inch, and other high-performance professional equipment, the BR-S525E's newly-developed cassette loading mechanism can directly accept both regular and C-sized S-VHS cassettes. The tape transport system has also been improved to provide faster search speeds and more stable transport. C-size S-VHS cassettes are already popular in image acquisition – as exemplified by the success of JVC's GY-X1 S-VHS-C camcorder – and are expected to assume a more important role in distribution, on-air transmission, and other applications.

* Technology licensed by **FAROUDJA** Laboratories.
* Employs chroma-enhancing technology co-developed by JVC and **FAROUDJA** Laboratories and modified for S-VHS applications.

High-quality pictures
S-VHS picture quality* has been improved still further with the addition of advanced circuitry including a digital DOC. Moreover, this high picture quality is maintained through multi-generational dubbing; even after as many as five generations, the results match those available from 3/4-inch equipment. For improved playback picture performance, noise reduction circuitry and switching noise masking are provided.

Fully-equipped for high-performance professional edit feeding
The BR-S525E is equipped with a comprehensive set of studio level feeder functions such as frame servo, auto H-Phase lock, and capstan bump. Search/jog dials are also provided for fast and accurate location of edit points with maximum visual search speed increased to 32x.

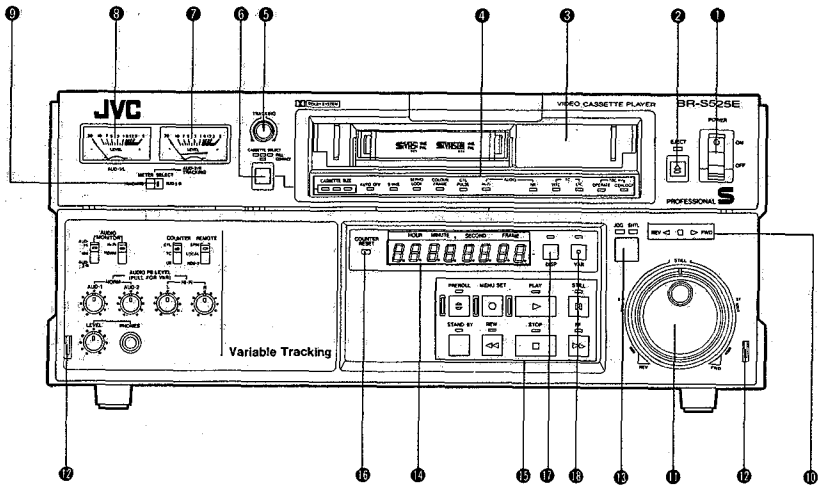
Menu Display and On-Screen Mode Check
For easy set-up and customisation, the BR-S525E features a menu display which allows simple dial setting and switching of most basic functions while referring to indications on the counter display or on-screen. As a result, many seldom-used external switches have been eliminated. Even functions normally requiring DIP switch resetting can be switched directly via the menu display. On-screen mode check and warning indications are also provided.

Other features
- RS-422 9-pin serial remote interface
- Optional plug-in time code reader (LTC/VITC)
- Hi-Fi Stereo system with a dynamic range of more than 87 dB
- Two-channel normal audio with switchable Dolby B* noise reduction
- Independent audio output level controls for all four channels
- XLR balanced audio connectors
- 2 level meters switchable between Hi-Fi and Normal audio
- 8-Digit time counter for tape position indication in either TC or CTL mode
- Jog/shuttle dials
- High-speed visual search at up to 32x (14x with C-size cassettes)
- External reference input for reference video
- Y-Frequency Response Control
- Automatic H-phase lock
- Wide-format (16:9) playback capability
- Tiltable control panel
- Heavy-duty mechanism
- Self-diagnostic warning system
- Front-access test points
- Automatic head cleaning mechanism
- 9999-hour meter switchable from tape counter
- Headphone jack with adjustable level output
- 19-inch EIA rack mount capability
- 4-Field sequence colour frame servo

* Dolby noise reduction manufactured under license from Dolby Laboratries Licencing Corporation. "Dolby" and the Double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

CONTROLS AND CONNECTORS

FRONT PANEL



❶ **POWER switch**
- When power is ON, the time counter and level meters will be illuminated.

❷ **EJECT button with LED indicator**
- Ejects the cassette (from any mode).
- The indicator lights while the cassette is being ejected.

❸ **Cassette loading slot**
- Accepts either a compact or full-size S-VHS/VHS cassette according to the type selected with the *CASSETTE SELECT* button ❻.

❹ **LED indicators**

CASSETTE SIZE indicators
- Indicate whether the player is in the Full or Compact mode. When all three indicators are blinking, the player is ready to accept a full-size cassette. When only the center indicator is blinking, the player is ready to accept a compact cassette. Press the CASSETTE SELECT button ❻ to change modes. When a cassette is inserted, the blinking will stop and the corresponding indicator(s) will remain continuously lit.

AUTO OFF indicator
- Lights when the unit malfunctions. All controls are disabled.

S-VHS indicator
- Lights when an S-VHS or S-VHS-C cassette is inserted with the unit in the S-VHS mode, or when playing back a blank part of the tape.

TBC indicators

OPERATE: Lights when the TBC is in operation. A timebase-corrected signal is output.

GENLOCK: Lights when the TBC is in operation and locked to the external reference signal.

SERVO indicators

SERVO LOCK: Lights when the capstan and drum servos are locked to the reference signal.

CTL PULSE: Lights during playback of a tape with no control pulse recorded.

COLOUR FRAME: Lights when the capstan and drum servos are locked to PAL 4-field colour frame.

AUDIO indicators

Hi-Fi: Lights when playing back Hi-Fi-recorded tapes.

NR: Lights when the Dolby B* noise reduction circuit is set to ON (via menu item #201, ☞ p.24).

TC (TIME CODE) indicators

(with optional SA-R22E TC [time code] generator/reader installed)

LTC: Lights green when LTC-recorded tapes are played back with the normal audio-2 track set for LTC use (via menu item #206, ☞ p.25). If LTC is not picked up, the indicator lights orange. This indicator may also light when normal-audio-recorded tapes are played back.

VITC: Lights when VITC-recorded tapes are played back.

❺ **TRACKING control**
- Adjusts tracking when the PB HEAD select switch is set to "NORM". Turn in either direction until the tracking meter deflects all the way to the right.
- Normally leave in the centre click-stop position.

❻ **CASSETTE SELECT button**
- Press to select FULL or COMPACT. The corresponding indicator(s) will light. (Cassette size selection is inhibited when menu item #332 is set to "01 – ON", ☞ p.27.)

❼ **AUD-2/R (TRACKING) level meter**
- Indicates the audio level of the normal audio-2 or Hi-Fi right-channel signal during playback.
- Functions as a tracking meter during playback when the METER SELECT switch ❾ is set to TRACKING.

❽ **AUD-1/L level meter**
- Indicates the audio level of the normal audio-1 or Hi-Fi left-channel signal during playback.

❾ **METER SELECT switch**
- Switches the AUD-2/R level meter ❼ between audio level and video tracking.

AUD-2/R: Meter functions as the audio-2/Hi-Fi right-channel level meter.

TRACKING: Meter functions as a tracking meter.

❿ **Tape direction indicators**
- Indicate the current tape direction.

▷: Forward
□: Still
◁: Reverse

⓫ **JOG/SHUTTLE/VARIABLE dials**
- Dual concentric controls. The outer functions as a Shuttle/Variable ring, the inner as a Jog dial. The Jog, Shuttle and Variable-Tracking modes can be entered directly from the Play, Still, FF, REW, or Stop modes. To select the Shuttle mode or the Variable-Tracking mode, press the corresponding button (JOG/SHUTTLE or VAR).

SHUTTLE/
VARIABLE ring: (In Shuttle mode) Search speed can be varied continuously from 1/30 to 32 times normal (up to 14 times normal with C-size cassettes) in forward or reverse. Set to the centre click-stop position to engage the Still mode.
(In Variable-Tracking mode) Tape speed can be varied from –2 to +3 times normal. Noiseless variable-speed playback is available. When turned fully clockwise, tape speed is +3 times normal. When turned fully counterclockwise, tape speed is –2 times normal. Set to the centre click-stop position to engage the Still mode.

JOG dial: Manual field-by-field search in either direction. Tape speed is determined by the speed of dial rotation. Releasing the dial engages the Still mode. Also used in menu setting.

⓬ **Control panel lock release buttons**
- To tilt the control panel, press these buttons and lift the panel at the same time. The panel can be tilted to 90° and locked at angles of 25°, 50°, and 75°.

⓭ **JOG/SHUTTLE button with JOG/SHTL mode indicators**
- Activates the Shuttle mode with search speed determined by the current dial setting.

⓮ **Time counter**
- Shows tape time in hours, minutes, seconds, and frames.
- Displays user bits (with optional time code reader installed).
- Displays menu settings and warnings.
- Displays Program Playback/Variable-speed Playback tape speed.

⓯ **Operation buttons with LED indicators**

STILL button
- Displays a still picture when pressed in the Play mode.

PLAY button
- Starts playback.
- Re-starts normal playback when pressed in the Still or Search mode.
- Changes the setting of setup menu items.

PREROLL button
- Prerolls the tape by about 7 seconds. Preroll time is selectable via menu item #320 (☞ p.27).

STAND BY button
- Switches between the Standby-On and Standby-Off modes while the player is in the Stop mode. Standby-On is automatically engaged when the Stop button is pressed.

Standby-On: The tape is loaded and the drum is rotating. The indicator is lit.

Standby-Off: The tape is loaded but tape tension is reduced and the drum does not rotate. The indicator is not lit. Standby-off status is selectable via menu item #310 (☞ p.26).

REW button
- Starts rewind when pressed in any mode. Maximum REW speed is selectable via menu item #319 (☞ p.27)

STOP button
- Engages the Stop mode (Standby-On). The tape stops, but remains in the full-loaded position with the drum rotating.
- The STOP and STAND BY indicators will light.

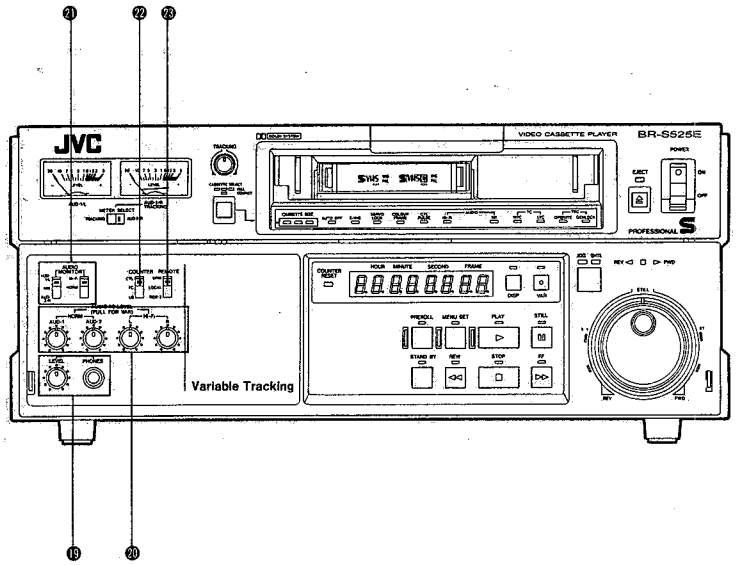
FF button
- Starts fast forward when pressed in any mode. Maximum FF speed is selectable via menu item #319 (☞ p.27)

MENU SET button
- Stores new settings for setup menu items.

⓰ **COUNTER RESET button**
- Resets the CTL counter to zero.
- The CTL counter will be reset even if this button is pressed in the TC mode.

⓱ **DISP button with LED indicator**
- Displays tape speed during Variable-speed Playback or Program Playback on the counter. Tape speed of Program Playback is indicated by percentage. (eg. –12.0: 12 % slow than normal speed) The indicator is lit. The DISP button has no effect in the Jog/Shuttle mode. Jog/Shuttle tape speed cannot be displayed.
- Press again to return to normal counter display.

⓲ **VAR button with LED indicator**
- Engages Variable-speed Playback with tape speed determined by the current dial setting if menu item #700 is set to "00 – VAR". Tape speed can be varied by turning the Shuttle dial. (☞ p.20)
- Starts Program Playback at programmed tape speed when pressed together with the Play button if menu item #700 is set to "01 – P.PLY". (☞ p.19)



⑱ PHONES jack/LEVEL control
- Connect a set of headphones to monitor sound playback.
- Adjust output level with the LEVEL control.

⑲ Hi-FI L/R and NORM AUD-1/AUD-2 AUDIO PB LEVEL controls
- To separately adjust playback levels for the Hi-Fi left/right-channel signals and the normal (linear) audio-1/2 signals. Pull and turn for adjustment.
- Optimum level is the point where the corresponding meter's peak deflection is "0".

㉑ AUDIO MONITOR select switches
- To select the audio output for the PHONES jack and the AUDIO MONITOR OUT connector.
- The Hi-FI/NORM switch also switches the audio level meters between Hi-Fi and NORMAL.

Hi-Fi: To monitor the Hi-Fi audio signals.
NORM: To monitor the normal audio signals.
AUD-1/L: To monitor the normal audio-1 or Hi-Fi left-channel signal.
MIX: To monitor the AUD-1/L and AUD-2/R signals together.
AUD-2/R: To monitor the normal audio-2 signal or Hi-Fi right-channel signal.

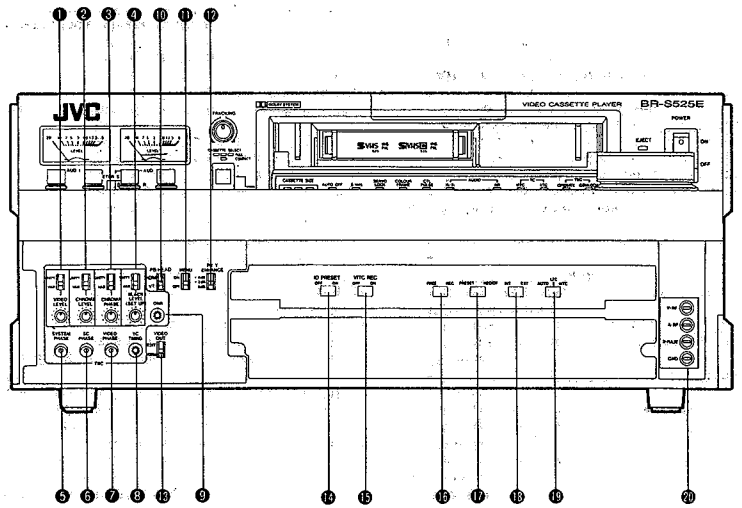
㉒ COUNTER select switch
- To select the time counter display mode with the SA-R22E TC generator/reader installed. If this is not installed, CTL signals are displayed regardless of the switch setting.

CTL: CTL signals are displayed on the time counter.
TC: Time code signals are displayed on the time counter.
UB: User bits are displayed on the time counter.

㉓ REMOTE select switch
- To select between remote and local control of the player.

9-PIN: For remote control via the rear panel 9-pin connector.
LOCAL: For direct control with the player's function buttons.
REM-2: For remote control via the optional interface.

FRONT SUB-PANEL



TBC CONTROLS
(TBC is always set to ON.)

❶ VIDEO LEVEL UNITY/VARIABLE select switch/level control

UNITY: The output signal's video level is the same as the playback signal. Normally set to this position.
VARIABLE: Allows you to adjust the output signal's video level with the VIDEO LEVEL control. Adjustment is possible within ±3 dB.

❷ CHROMA LEVEL UNITY/VARIABLE select switch/level control

UNITY: The output signal's chroma level is the same as the playback signal. Normally set to this position.
VARIABLE: Allows you to adjust the output signal's chroma level with the CHROMA LEVEL control. Adjustment is possible within ±3 dB.

❸ CHROMA PHASE UNITY/VARIABLE select switch/level control

UNITY: The output signal's chroma phase is the same as the playback signal.
VARIABLE: Allows you to adjust the output signal's chroma phase with the CHROMA PHASE control. Adjustment is possible within ±30°.

❹ BLACK LEVEL (SET UP) VARIABLE/UNITY select switch/level control

UNITY: The output signal's setup level is the same as the playback signal.
VARIABLE: Allows you to adjust the output signal's setup level with the BLACK LEVEL (SET UP) control. Adjustment is possible within ±107 mV.

❺ SYSTEM PHASE control
- Adjusts the output signal's horizontal phase with respect to that of the reference input signal. Adjustment is possible within a range of ±3 µsec.

❻ SC PHASE
- Adjusts the output signal's subcarrier phase with respect to that of the reference input signal. Up to 15 rotations are possible with continuous variation over a range of ±180°.

❼ VIDEO PHASE control
- Adjusts the output signal's video phase with respect to the playback signal's H sync. Up to 15 rotations are possible with continuous variation over a range of ±1.5 µsec.

❽ YC TIMING control
- Adjusts the output signal's C signal delay time with reference to the Y signal. Adjustable within ±500 nsec.
- Normally set to "8".

❾ DNR control
- Adjusts digital noise reduction. (☞ p.18)

⑩ PB HEAD select switch
- Selects the head in normal playback.

NORM: For playback with the fixed heads. (Set to this position for tracking adjustment.)
VT: For playback with the VT heads. Hi-Fi audio is not output except in the x1 mode.

NOTES:
- Playback heads will automatically switch to VT heads when the Jog, Shuttle or Variable-Tracking mode is engaged.
- Before playing back with VT heads, be sure to adjust the tracking first by setting the switch to "NORM".

⑪ MENU ON/OFF switch
- SET to ON to activate the On-Screen Menu. The counter display will also switch to the Menu Set mode.
- Most basic system setup operations are performed using the Menu.

⑫ PB Y ENHANCE switch
- Enhances the luminance signal for a sharper playback picture.

+4 dB: Boosts luminance signal level by 4 dB at 2.5 MHz for maximum picture sharpness.
+2 dB: Boosts luminance signal level by 2 dB at 2.5 MHz for a sharper picture.
0 dB: No effect. The same result is obtained by setting the VIDEO OUT select switch ⑬ to EDIT.

⑬ VIDEO OUT select switch

EDIT: Set to this position when using the BR-S525E as a feeder in editing. DNR function is OFF.
NORM: Normally set to this position. DNR function is ON. (☞ p.18 "DIGITAL NOISE REDUCTION ADJUSTMENT")

If noise is noticeable in the playback picture during editing or dubbing in the Variable Tracking mode, we recommend that you activate the DNR by setting the VIDEO OUT select switch to "NORM". For best results, do not do this more than once.

TIME CODE GENERATOR/READER SETTING SWITCHES
(With SA-R22E TC generator/reader installed)

Some controls in this section are associated with TC recording functions only and have no effect on the BR-S525E.

⑭ ID PRESET ON/OFF switch
- No effect.

⑮ VITC REC ON/OFF switch
- No effect.

⑯ FREE/REC switch
- No effect.

⑰ PRESET/REGEN switch

Always "REGEN" regardless of the setting of this switch.
REGEN: To output time code signal regenerated by the internal TC generator in sync with the playback time code signal. (☞ p.28, menu item #404, 405)

⑱ INT/EXT switch
- Always "INT" regardless of the setting of this switch.

⑲ AUTO/LTC/VITC switch
- To select the TC reader mode. Select the mode according to the type of reference time code with which the internal TC generator is synchronised in the Regen mode.

AUTO: For tapes with matching VITC and LTC data. Counts time codes in VITC at tape speeds lower than normal, and in LTC at speeds higher than normal. Missing sections and sections at speeds higher/lower than ±10 times normal are interpolated with CTL counts.
LTC: For LTC-only tapes or when editing with LTC data. Counts time codes in CTL at tape speeds lower than normal, and in LTC at speeds higher than normal. Missing sections and sections at speeds higher/lower than ±10 times normal are interpolated with CTL counts.
VITC: For VITC-only tapes or when editing with VITC data. Counts time codes in VITC at tape speeds lower than normal, and in CTL at speeds higher than normal. Missing sections and sections at speeds higher/lower than ±10 times normal are interpolated with CTL counts.

⑳ Test points

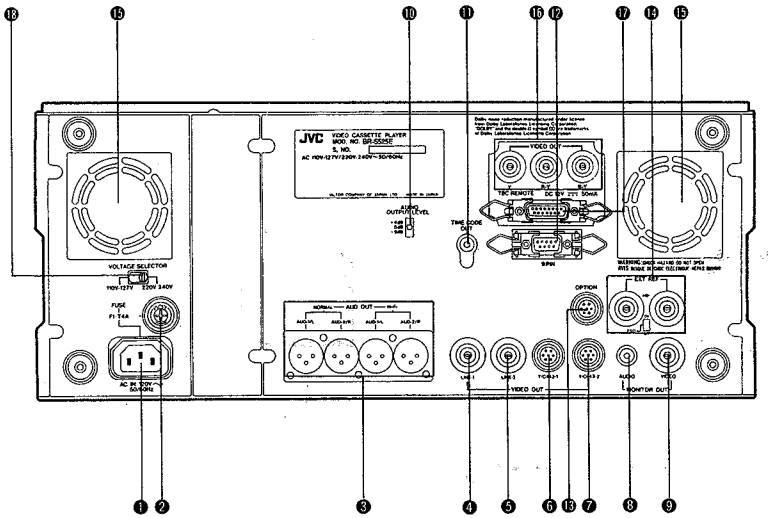
V-RF test point
- Outputs the video head FM signal during playback.
- Can be used for detection of clogged or worn heads.

A-RF test point
- Outputs the Hi-Fi audio FM signal during playback.
- Can be used for detection of clogged or worn heads.

D-PULSE pin
- Connect to the external trigger terminal of an oscilloscope.

GND
- Connect to the ground terminal of an oscilloscope.

REAR PANEL



❶ AC IN socket
- Connect to 110 – 127 V or 220 – 240 V AC, 50/60 Hz power outlet.

❷ Fuse holder

❸ Audio output connectors

AUDIO OUT NORMAL: Normal audio output connectors for Audio-1 and Audio-2.
AUDIO OUT Hi-Fi: Hi-Fi audio output connectors for Left and Right. (☞ p.24, menu item #203)

❹, ❺ VIDEO OUT LINE (1, 2) connectors
- The composite video signal is output from these connectors.

❻, ❼ VIDEO OUT Y/C443 (1, 2) connectors
- The Y/C443 signal is output from these connectors.

❽ AUDIO MONITOR OUT connector
- The audio signal selected with the AUDIO MONITOR select switches is available at this connector.

❾ VIDEO MONITOR OUT connector
- The composite video output signal is available at this connector. On-screen information is also supplied.

❿ AUDIO OUTPUT LEVEL select switch
- To select –6 dB, 0 dB, or +4 dB according to the input level of connected audio equipment. All four audio channels are switched simultaneously.

⓫ TIME CODE OUT connector
- Connect a time code reader to the OUT connector for external time code reading.

⓬ 9-PIN connector
- Connect to an RS-422 9-pin serial remote control unit or to the RS-422 9-pin connector of a recorder for swap editing.

⓭ OPTION connector
- Delivers the Y/C686/924 signal (with optional SA-E92E Output board installed) to the DUB IN connector of 3/4" U-VCR machines. (☞ p.24, menu item #102)

⓮ EXT REF connectors with 75-ohm terminating switch
- Supply the reference signal (either black burst signal or composite video) to the left connector and set the 75-ohm terminating switch to ON.
- To output a loop-through signal to another unit, set the 75-ohm terminating switch to OFF.

NOTE:
- Do not use a black-and-white signal or sync signal without burst as the reference signal, otherwise the intended synchronisation will not be obtained.

⓯ Fans

⓰ COMPONENT OUT connectors

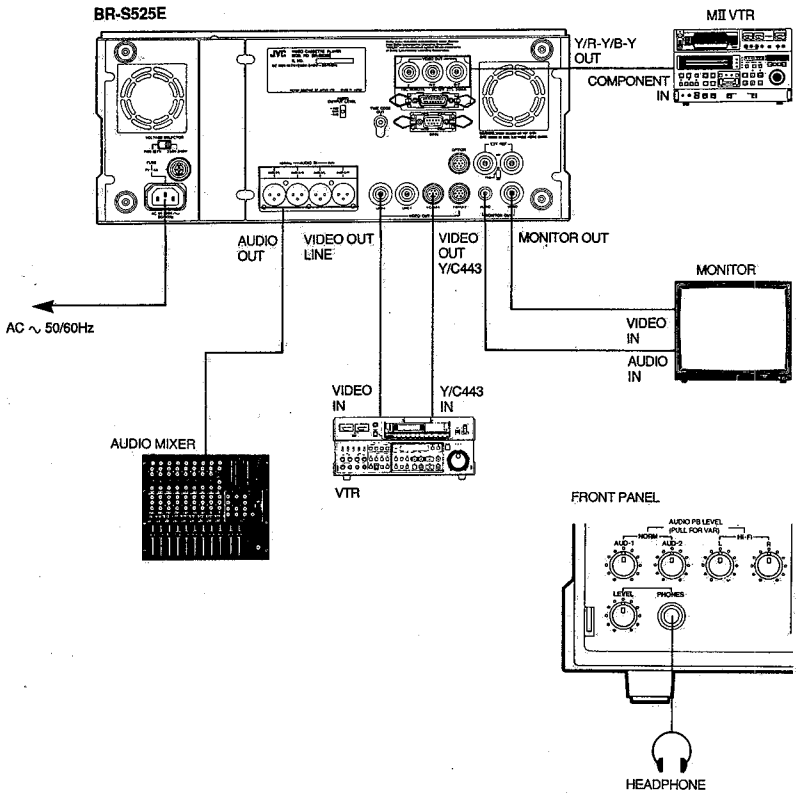
Component video signals (Y/R-Y/B-Y) are output. (☞ p.24, menu item #104)

⓱ TBC REMOTE connector (15-pin)

⓲ VOLTAGE SELECTOR
- Select voltage according to your local power supply. (Be sure the POWER is off when setting the voltage.)

CONNECTIONS

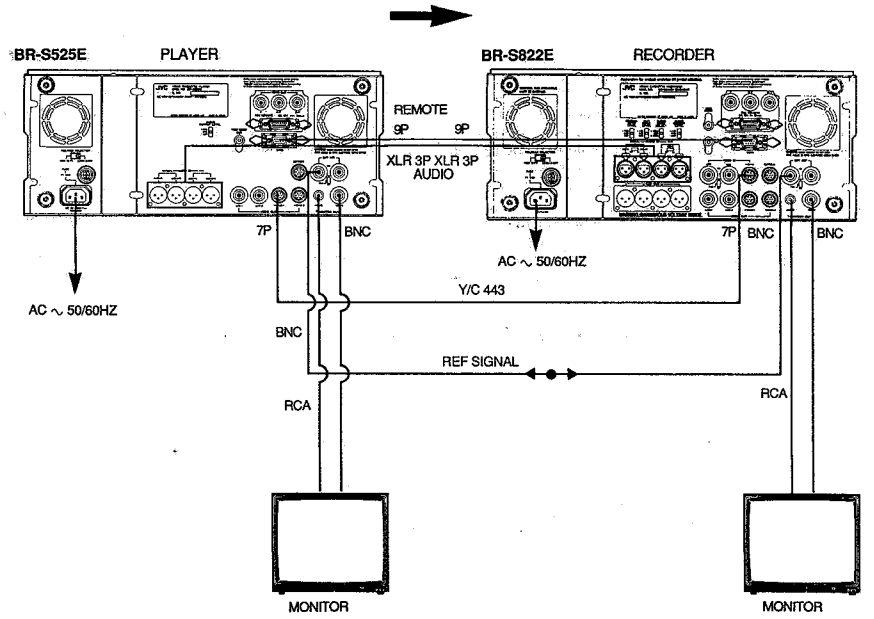
VIDEO/AUDIO CONNECTIONS



NOTES:

- To output the loop-through signal, set the 75-ohm terminating switch to OFF, otherwise set it to ON. (Be sure to terminate the signal at the last of the connected units.)
- On-screen information is output from the VIDEO MONITOR OUT connector only.
- M-II and Betacam component signals are selectable via menu item #104. (☞ p.24)

SWAP EDITING CONNECTIONS



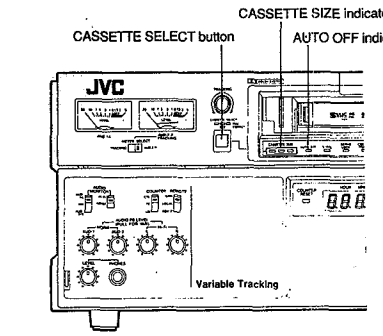
NOTES:

- For swap editing procedures, refer to the BR-S822E Editing Recorder's instruction manual.
- Variable-speed Playback cannot be controlled from the recorder.

LOADING AND UNLOADING VIDEO CASSETTES

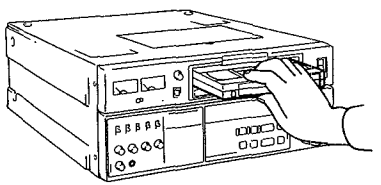
LOADING

1. Switch on the power.
2. Check the AUTO OFF indicator.
   - If this indicator lights, some abnormal condition such as condensation has occurred. All functions except Eject are disabled.
3. Check the CASSETTE SIZE indicators.
   - If you're loading a full-size cassette, be sure that all three indicators are blinking.
   - If you're loading a compact cassette, be sure that only the center indicator is blinking.
   - Press the CASSETTE SELECT button to change modes.
4. Insert a cassette with its label side facing you.
   - The cassette is automatically retracted and loaded.
   - The BR-S525E enters the Stop/Standby-On mode. The STOP and STAND BY indicators will light. In this mode, the tape is fully loaded and the head drum is rotating. The CASSETTE SIZE indicator(s) will stop blinking but remain illuminated.



NOTES:
- Be sure that the CASSETTE SIZE indicator(s) is blinking when inserting a cassette.
- Cassette size selection is not possible when menu item #332 is set to "ON" (☞ p.27).

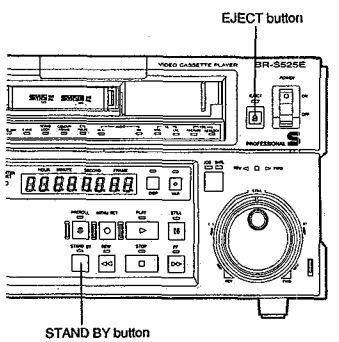
5. To cancel the Standby-On mode, press the STAND BY button.
   - The head drum will stop rotating, but the tape remains in the full-loaded position. The STAND BY indicator will go out.
   - As soon as you engage another mode (Play, Rewind, Fast Forward, etc.), the STAND BY indicator will come on again.



UNLOADING

1. Press EJECT.
   - The cassette is ejected automatically.
   - You can press the EJECT button in any mode.
2. Remove the cassette.

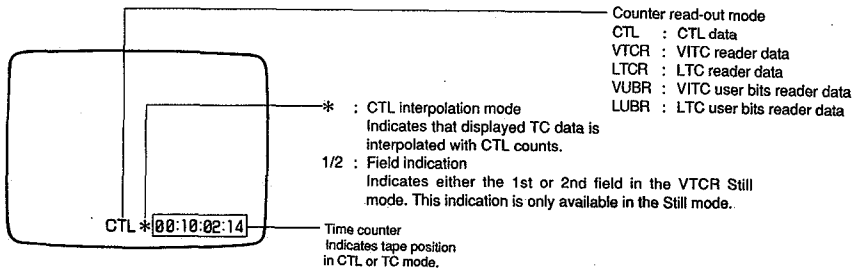
WARNING
- Do not insert fingers or foreign objects into the cassette loading slot as this may result in personal injury or damage to the mechanism.
- Do not try to remove the cassette once automatic loading has started.



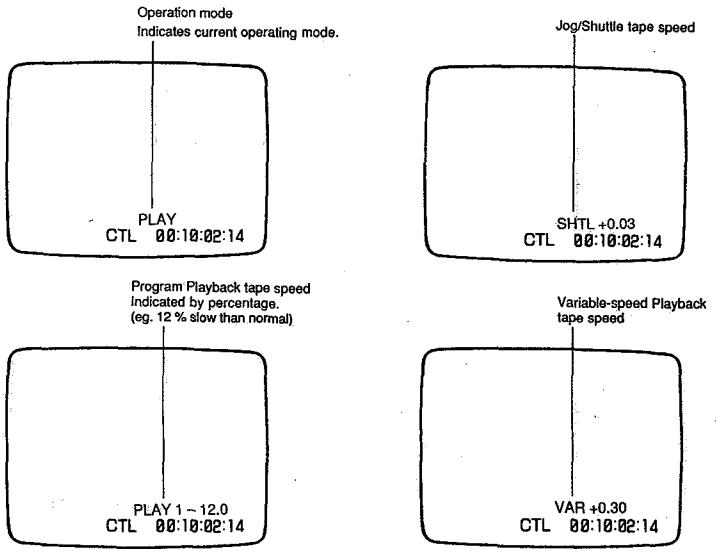
ON-SCREEN DISPLAYS

You can choose the display mode via menu setting. The time counter, operation mode and tape speed displays are available with the initial setting. You can reset the menu parameters to obtain either of the following displays.

Time counter


Counter read-out mode
CTL : CTL data
VTCR : VITC reader data
LTCR : LTC reader data
VUBR : VITC user bits reader data
LUBR : LTC user bits reader data
* : CTL interpolation mode
Indicates that displayed TC data is interpolated with CTL counts.
1/2 : Field indication
Indicates either the 1st or 2nd field in the VTCR Still mode. This indication is only available in the Still mode.
CTL * 00:10:02:14
Time counter
Indicates tape position in CTL or TC mode.

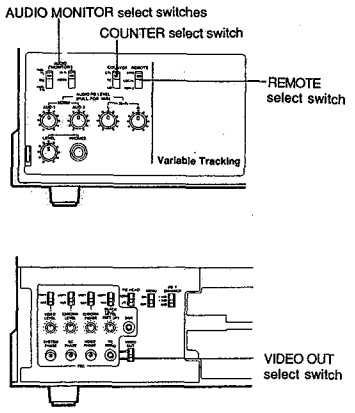
Time counter + Operation mode + Tape speed (Jog/Shuttle, Program Playback, Variable-speed Playback)



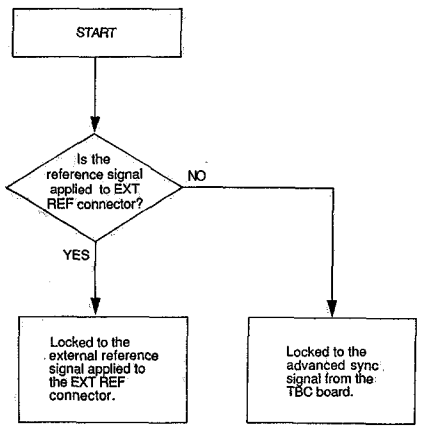
PLAYBACK

PREPARATION

1. Set the AUDIO MONITOR select switches as required. (☞ p.7)
2. Set the COUNTER select switch as required. (☞ p.7)
3. Set the VIDEO OUT select switch as required.
   NORM: for normal playback.
   EDIT: when using the BR-S525E as an edit feeder.
4. Set the REMOTE select switch as required. (☞ p.7)
5. Set menu item #201 "NORM. AUDIO DOLBY NR" as desired. (☞ p.24)



REFERENCE SIGNALS

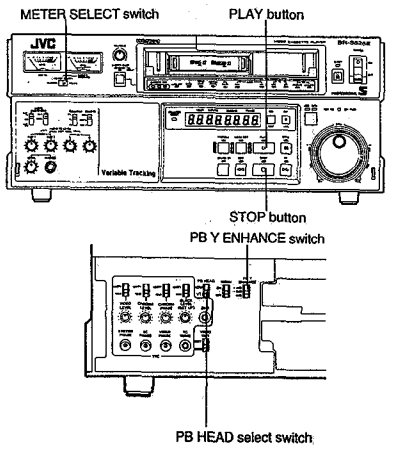

START
Is the reference signal applied to EXT REF connector?
NO
YES
Locked to the external reference signal applied to the EXT REF connector.
Locked to the advanced sync signal from the TBC board.

NOTES:
- Supply a reference signal containing burst to the EXT REF connector.

PROCEDURE

1. Press the PLAY button.
   - Normal playback starts.
2. Check the tracking level.
   - Set the PB HEAD select switch to "NORM".
   - Set the METER SELECT switch to TRACKING.
   - Adjust the TRACKING control until the tracking meter (AUD-2/R) deflects fully to the right.
   - Check the monitor screen to be sure that the picture is not blurred or marred by noise bars.
3. Set the PB HEAD select switch as desired. (☞ p.9)
4. Set the PB Y ENHANCE switch as required.
   - If the VIDEO OUT select switch is set to EDIT, this switch has no effect.
5. Press the STOP button to stop playback.

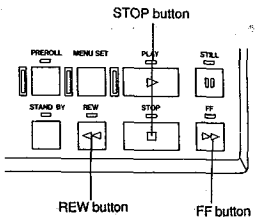
NOTES:
- LP recordings cannot be played back.
- The BR-S525E is preset to enter the Stop mode at tape end. If you want the unit to automatically rewind when the end of the tape is reached, set menu item #312 to "01 – REW". (☞ p.26)



REWIND AND FAST-FORWARD

1. To rewind the tape at high speed, press REW in any mode.
2. To advance the tape at high speed, press FF in any mode.
3. Press STOP to stop rewind or fast-forward.

NOTES:
- Maximum REW/FF speed is selectable via menu item #319 (☞ p.27)
- For information about signal output during REW/FF, refer to menu items #313, #314 (☞ p.26), and #319 (☞ p.27)



SHUTTLE SEARCH

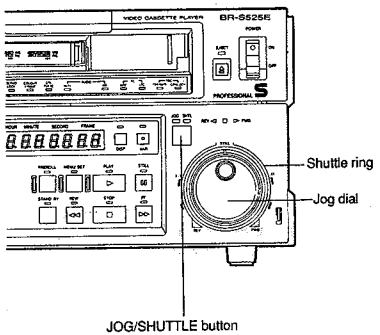
1. Press the JOG/SHUTTLE button.
   - Shuttle search starts with search speed determined by the current dial setting.
   - The SHTL indicator lights.
2. Turn the ring to adjust tape speed and direction as required.
   - The STILL position (center click-stop) provides a still picture.
   - Turn the dial clockwise to search in the forward direction; counterclockwise to search in the reverse direction.
   - The X1 click-stop provides normal speed search in the forward direction. X–1 provides normal speed search in the reverse direction.
   - Another click-stop is located between X1 and the maximum position. This provides search at 10 times normal speed.
   - When the dial is turned fully clockwise or counterclockwise, maximum search speed (about 32 times normal with full-size cassettes and 14 times normal with C-size cassettes) is provided. Noiseless search is available at speeds from –2 to +3 times normal.
   - To change modes, press the button corresponding to the desired mode (PLAY, STOP, REW, FF)
   - For immediate reactivation of the Shuttle mode at the search speed corresponding to the current dial setting, press the JOG/SHUTTLE button.

NOTES:
- Search mode is selectable via menu item #301 (☞ p.25).

JOG SEARCH

Turn the inner Jog dial to adjust tape speed and direction as required.
- The BR-S525E enters the noiseless Jog mode and the JOG indicator lights.
- Tape speed varies in relation to how quickly you turn the dial.
- When the dial is released, the VCR enters the Still mode.

NOTES:
- Leaving the BR-S525E in the Still mode for too long may damage the tape. To prevent this, the tape is automatically shifted to another video track when the Still mode continues for more than 5 minutes. (selectable with menu item #307, ☞ p.25.)



PREROLL PLAYBACK

This function allows you to cue programmes for feeding or insertion and ensures that the tape is stabilised when the picture is transmitted.
1. Locate the point where you wish playback to begin.
2. Press PREROLL.
   - The tape will rewind about 7 seconds of programme time and enter the Stop mode. (Preroll time is selectable via menu item #320, ☞p.27)
3. Press PLAY exactly 7 seconds before the scheduled insertion time.
   - Playback starts. When transmission starts, the picture will be fully stabilised.

NOTES:
- If menu item #322 is set to "01 – ENTERED", the IN point is entered automatically when the PREROLL button is pressed. Press the COUNTER RESET button to cancel entered IN point.
- Preroll function is not possible in Program Playback mode.

AUDIO PLAYBACK LEVEL ADJUSTMENT

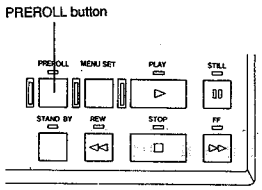
- Set the rear panel AUDIO OUTPUT LEVEL select switches to match the input signal level of connected equipment.
- Set the METER SELECT switch to AUD-2/R.
- For Hi-Fi audio level adjustment, set the AUDIO MONITOR switch to Hi-Fi and adjust the Hi-Fi AUDIO PB LEVEL L/R controls until the meters deflect to "0" at peak signal level.
- For normal audio level adjustment, set the AUDIO MONITOR switch to NORM and adjust the NORM AUDIO PB LEVEL AUD-1/AUD-2 controls until the meters deflect to "0" at peak signal level.
- The controls can be turned when pulled out.

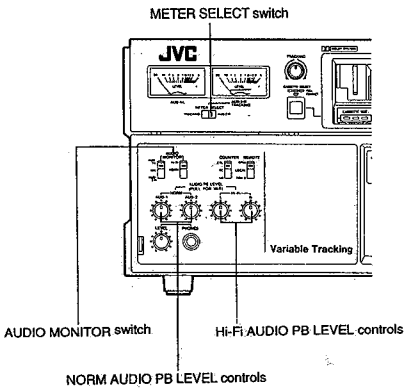
DIGITAL NOISE REDUCTION ADJUSTMENT

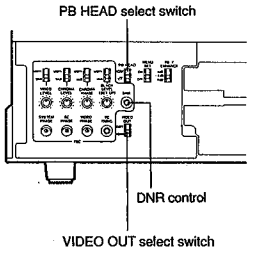
- Turn the DNR control to adjust the digital noise reduction level.
- The DNR effectiveness level gradually increases as the control is turned from "0" to "D".
- Even in the "0" position, there is some digital noise reduction. If you want to completely defeat DNR, set the VIDEO OUT select switch to "EDIT". DNR can also be cancelled in normal playback* with the following combination of settings.
  VIDEO OUT select switch set to "NORM".
  PB HEAD select switch set to "NORM".
  Menu item #602 "DNR AT NORM. PB" set to "OFF".

  * Normal playback means the Play mode engaged by pressing the PLAY button. (Playback engaged with the Shuttle dial is not included.)
- When playing back a tape with an extremely low S/N ratio, set the control to the "E" or "F" position.

NOTE:
- DNR functions only when the VIDEO OUT select switch is set to "NORM". If this switch is set to "EDIT", DNR does not function.



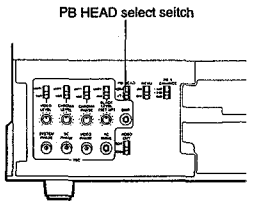




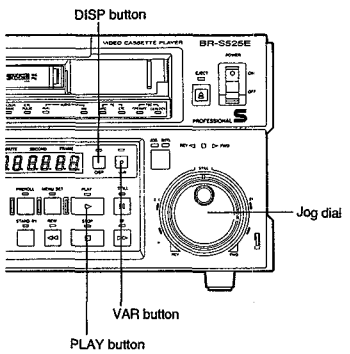
PROGRAM PLAYBACK

This mode allows you to compress or expand playback time in steps of 0.1 % over a range of ±20 %.

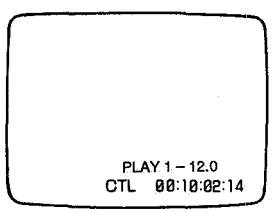
- Be sure to set the PB HEAD select switch to VT (☞ p.9)



1. Set menu item #700 to "01 – P.PLY". (☞ p.28)
2. Turn the Jog dial while pressing the VAR button to set desired tape speed.
   - Tape speed can be displayed on the counter by pressing the DISP button.



3. Press PLAY together with VAR.
   - Program Playback starts at programmed speed. (The VAR indicator lights.)
   - Tape speed is displayed on screen by percentage during Program Playback. (You can also display tape speed on the counter by pressing the DISP button.)
   - Tape speed can be changed during Program Playback by turning the Jog dial with the VAR button pressed.
4. Press any of the operation buttons to cancel this mode. (Player enters the operation mode corresponding to the button you pressed.)



NOTES:

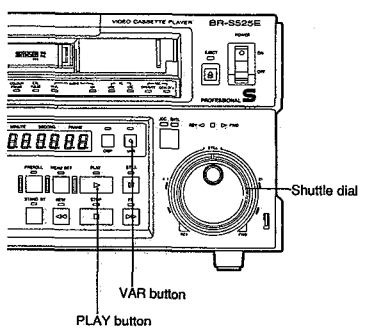
- Hi-Fi audio is not output during Program Playback except in the x1 mode.

VARIABLE-SPEED PLAYBACK

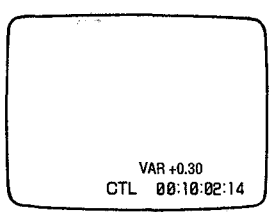
This mode ensures clear, noiseless variable-speed playback using VT (Variable Tracking) heads.

- Playback heads will automatically switch to VT heads regardless of the setting of the PB HEAD select switch.
- When the VT heads are used, the head switching point automatically switches to "PB4.5H" regardless of the setting of menu item #100.

1. Set menu item #700 to "00 – VAR". (☞ p.28)
2. Press VAR.
   - Variable-speed playback starts with tape speed determined by the current dial setting.
   - The VAR indicator lights.
3. Turn the Shuttle dial to set desired tape speed.
   - You can vary tape speeds in 73 steps from –2 to +3 times normal.
   - Tape speed is displayed on screen. (You can also display tape speed on the counter by pressing the DISP button.)
   - Click-stop positions are at –2, –1, STILL, +1, and +3.



4. To cancel this mode, press any of the operation buttons. (Player enters the operation mode corresponding to the button you pressed.)



Preset mode

1. Set menu item #301 to "00 – PRESET". (☞ p.25)
2. Press DISP.
3. Turn the Shuttle dial to set desired tape speed.
4. Press VAR in any modes to start Variable-speed Playback at the preset tape speed.
5. To cancel this mode, press any of the operation buttons.

NOTES:

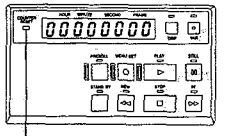
- Hi-Fi audio is not output during variable-speed playback except in the x1 mode.

COUNTER DISPLAY

The BR-S525E's time counter shows tape time in hours, minutes, seconds, and frames in both CTL and TC modes. It also displays user bits, menu settings, and warning codes. If the DISP button is the pressed in the Variable-Tracking mode, Program Playback/Variable-speed Playback tape speed is displayed.

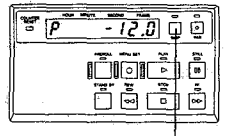
Resetting the counter
In the CTL mode, you can press the COUNTER RESET button to reset the time counter to zero.

NOTES:
- The counter cannot be reset during preroll.



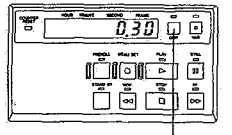
COUNTER RESET button

Program Playback tape speed display
(With menu item #700 set to "01 – P.PLY".)
- Press the DISP button in the Program Playback mode to display tape speed.
- Press again to return to the time counter.



DISP button

Variable-speed Playback tape speed display
(With menu item #700 set to "00 – VAR".)
- Press the DISP button in the Variable-speed Playback mode to display tape speed.
- Press again to return to the time counter.



DISP button

NOTES:
- For details on menu setting and warning code displays, ☞ p. 23 and p. 31.

TIME CODE/USER BITS

TIME CODE

This system simplifies location and specification of video frames by marking each frame with an 8-digit code number or "address". Essential for accurate editing, these "addresses" represent absolute tape positions and are displayed in hours, minutes, seconds, and frames, allowing you to specify exactly where edits are to start and stop by entering the IN and OUT time code values.
There are two different time code systems: LTC and VITC.

LTC (Longitudinal Time Code)
Time code addresses are recorded on a dedicated linear track by a fixed head. With the BR-S525E, the audio-2 track functions as an LTC track. (☞ p.25, menu item #206)

VITC (Vertical Interval Time Code)
The VITC is recorded during the video signal's vertical blanking period by a rotary head. Besides leaving the audio-2 channel free for editing, this permits accurate readout during still and search at speeds less than normal.

The time code used for the BR-S525E and the SA-R22E time code reader/generator conforms to the EBU standard.

USER BIT

"User bits" is a portion of the time code signal allocated to the user. It can be used to record the operator number or reel numbers.

TIME CODE EDITING

Accurate editing in reference to time code data is possible with editing suites controlled via 9-pin serial interface.
- Install the SA-R22E TC board in the BR-S525E.
- Use another VCR with TC reading capability as the recorder, eg. the BR-S822E with SA-R22E TC board installed.
- For swap editing, connect the recorder and player via 9PIN connectors. Set the COUNTER switch to TC.
- For externally controlled editing, use a 9-pin serial editing controller. Switching between TC and CTL modes can be done with the controller.

TIME CODE PLAYBACK

- When tapes with time code are played back, the rear panel TIME CODE OUT connector outputs the playback time code signal in its original form. The counter shows time code being read by the internal TC reader (with COUNTER switch set to TC).
- If you need regenerated LTC time code from the TIME CODE OUT connector, re-set menu item #405 to "01 – TCG" (☞p.28). To dub time code, or to supply the playback time code signal to another VCR, use this mode for more assured time code recording.

NOTES:
- All time code data is cleared when power is switched off.

SETUP MENU

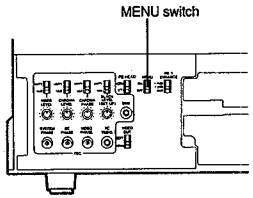
OPERATION

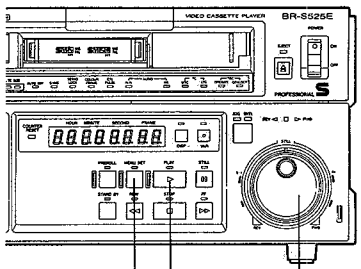
By engaging the Menu Set mode, you can cancel any preset functions that you don't require or change certain parameters as desired.

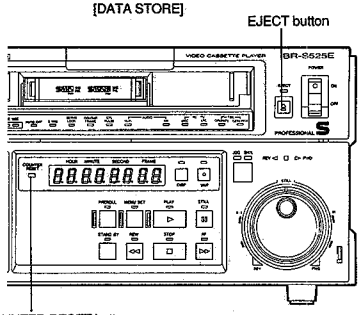
1. Set the MENU switch to ON.
   - The set-up menu appears on the monitor screen. The counter display will also switch to the Menu Set mode.
   - The Menu number (000) for the first item will blink.
2. Turn the Jog dial to locate the item you want to set.
   - Turning the dial clockwise increments the setting items (000→100→102, etc.); turning it counterclockwise, decrements the setting items.
3. When you locate an item you wish to change, press PLAY.
4. Press PLAY again to change the setting.
5. To continue setting, repeat steps 2 to 4.
6. Press MENU SET to store the new settings.
7. To exit the menu, set the MENU switch to OFF.

NOTE:

- All menu items can be automatically restored to their initial settings. To do this, first switch off the VCR's power. Then, while pressing COUNTER RESET, and EJECT simultaneously, switch on the power. Keep the buttons pressed for at least five seconds. All menu items will have been restored to their initial settings.

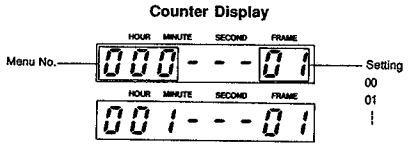




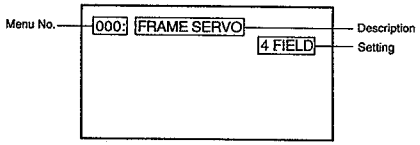


MENU SETTINGS

Counter Display



On-Screen Display



Blinking: Item ready to be set

(Initial settings are in brackets.)

Menu No.		On-Screen Description	Settings		Explanation
			Counter	On-Screen	
SERVO	000	FRAME SERVO	[01]	[4 FIELD]	4 FIELD: To use Colour Frame Servo when editing in colour frame servo mode.
			02	2 FIELD	2 FIELD: To use Frame Servo.
VIDEO	100	SWITCHING POINT	[00]	[PB4.5H]	Selects head switching point. The head switching point is automatically set to 4.5H when the VT heads are used though the preset remains the same on the display. PB4.5H: To position head switching point 4.5H ahead of V sync in playback (2H lower than normal). Normally use this setting.
			01	PB5.5H	PB5.5H: To position head switching point 5.5H ahead of V sync in playback.
	102	U-VCR Y/C MODE	[00]	[CONV.]	Selects the mode of the signal output via rear panel OPTION (Y-686/924) connector. (Effective with SA-E92E board) CONV.: To output Y-686 dubbing signal to conventional 3/4" U-VCR machines.
			01	HB/SP	HB/SP: To output Y-924 dubbing signal to 3/4" U-VCR SP or Hi-Band machines.
	104	COMPONENT OUT LEVEL	[00]	[LOW]	Selects the level of component signals output via rear panel Y/R-Y/B-Y connectors. LOW: To output component signals to MII machines.
			01	HIGH	HIGH: To output component signals to Betacam machines.
AUDIO	201	NORM. AUDIO DOLBY NR	00	OFF	OFF: To defeat Dolby NR circuit for normal audio.
			[01]	[ON]	ON: To activate Dolby NR circuit for normal audio.
	203	AUDIO OUT	[00]	[SEP.]	Selects output signals via rear panel AUDIO OUT connectors. SEP.: To output as labelled: normal audio from NORMAL AUD-1/AUD-2, Hi-Fi audio from Hi-Fi L/R.
			01	Hi-Fi	Hi-Fi: To output Hi-Fi audio from all connectors: NORMAL AUD-1 outputs Hi-Fi left-channel signal and NORMAL AUD-2 outputs Hi-Fi right-channel signal.
			02	NORM.	NORM: To output normal audio from all connectors: Hi-Fi L outputs normal audio-1 signal and Hi-Fi R outputs normal audio-2 signal.

Menu No.		On-Screen Description	Settings		Explanation
			Counter	On-Screen	
AUDIO	204	Hi-Fi OUT AT SEARCH	[00] 01	[MUTE] NORM	Selects output signals via rear panel Hi-Fi AUDIO OUT connectors during search. MUTE: To output muted Hi-Fi audio. NORM: To output normal audio.
	206	AUD-2/LTC	[00] 01	[AUD-2] LTC	Selects signals to be recorded on the normal audio-2 track. AUD-2: To play back tapes with no LTC recorded on the normal audio-2 track. LTC: To play back LTC-recorded tapes.
SYSTEM	300	DIRECT EJECT	00 [01]	DISABLE [ENABLE]	DISABLE: EJECT command is accepted only from Stop mode. ENABLE: EJECT command is accepted from any mode.
	301	SHTL DIAL SEL.	00 [01]	PRESET [DIRECT]	PRESET: The Shuttle dial functions only when the JOG/SHUTTLE or VAR button is pressed. DIRECT: The Shuttle dial functions whenever it is turned. When the dial is turned, the player enters either the Shuttle or Variable-Tracking mode depending on which was last engaged. To select the mode, press the corresponding button (JOG/SHUTTLE or VAR).
	303	WARNING INHIBIT	[00] 01	[OFF] ON	OFF: Malfunctions are detected for warning indications. Normally keep set to this position. ON: Detection of malfunctions is inhibited. No warning indication is available.
	305	REPEAT PLAY	[00] 01	[DISABLE] ENABLE	DISABLE: Repeat playback is not available. ENABLE: The entire tape is played back repeatedly until cancelled.
	306	LONG PAUSE	00 [01]	DISABLE [ENABLE]	DISABLE: To defeat Long Pause function. ENABLE: To use Long Pause function in Standby-On and Still modes. (Long Pause parameters are selected with menu items #307, #308 and #309.)
	307	LONG PAUSE TIME	00 01 02 03 04 05 06 [07]	1 SEC 10 SEC 30 SEC 1 MIN 2 MIN 3 MIN 4 MIN [5 MIN]	With menu item #306 set to ENABLE, selects the length of time before normal Pause (Standby-On and Still) mode changes to Long Pause.
	308	LONG PAUSE (STILL)	00 01 [02]	STANDBY-OFF T. RELEASE [STEP FWD]	Selects the contents of Long Pause mode. (After the time set with menu item #307 expires in Still mode, the VCR operates as specified.) STANDBY-OFF: Enters Standby-Off mode. T. RELEASE: Tension arm is released for tape protection. Still pictures continue to be available. STEP FWD: Tape advances in slow-motion for about 2 seconds (about 2 frames). This action is repeated 5 times at the time intervals set with menu item #307. The VCR enters the Standby-Off mode after the final interval.

Menu No.		On-Screen Description	Settings		Explanation
			Counter	On-Screen	
SYSTEM	309	LONG PAUSE (STOP)	[00] 01 02	[STANDBY-OFF] T. RELEASE STEP FWD	Selects the contents of Long Pause mode. (After the time set with menu item #307 expires in the Standby-On mode, the VCR operates as specified.) STANDBY-OFF: Enters Standby-Off mode. T. RELEASE: Tension arm is released for tape protection. Still pictures continue to be available. STEP FWD: Tape advances in slow-motion for about 2 seconds (about 2 frames). This action is repeated 5 times at the time intervals set with menu item #307. The VCR enters the Standby-Off mode after the final interval.
	310	STANDBY-OFF MODE	00 [01] 02	DRUM ON [DRUM OFF] UNLOAD	Selects the status of Standby-Off mode. DRUM ON: Head drum continues to rotate with tape loaded. DRUM OFF: Head drum stops rotating with tape loaded. UNLOAD: Head drum stops rotating and tape unloads.
	311	MODE AT TAPE BEGIN	[00] 01	[SHORT-FF] PLAY	Selects the mode entered when the beginning of the tape is detected. SHORT-FF: Fast-forwards the leader section and enters Standby-On mode. PLAY: Enters Play mode.
	312	MODE AT TAPE END	[00] 01	[SHORT-REW] REW	Selects the mode entered when the end of the tape is detected. SHORT-REW: Rewinds the leader section and enters Standby-On mode. REW: Rewinds to the beginning of tape and enters Standby-On or Play mode depending on the setting of menu item #311.
	313	PB•PB/BLACK	00 [01]	PB/BLACK [PB]	Selects output signal in the mode specified with menu item #314. PB/BLACK: Black signal without burst is output. PB: Outputs playback signal.
	314	PB/BLACK MODE	[00] 01	[STOP/FF/REW] STOP	Selects the modes in which playback signal is not output. STOP/FF/REW: Playback signal is not output in the Stop, FF and REW modes. STOP: Playback signal is not output in the Stop mode, but the search playback signal is output in FF and REW modes.
	315	LOCAL FUNCTION	[00] 01 02 03	[STOP,EJECT] STP,EJ,PLY,FF, RW,STL ALL ENABLE ALL DISABLE	Selects functions that can be locally operated when front panel REMOTE switch is set to 9PIN or REM-2.
	316	9PIN CMD FUNCTION	[00] 01	[ALL DISABLE] STOP, EJECT	Selects 9-pin remote control commands that are acceptable when front panel REMOTE switch is set to LOCAL. ALL DISABLE: Accepts no command from 9-pin remote control. STOP,EJECT: Accepts STOP and EJECT commands only. (Note: With some remote controls, no commands are accepted.)

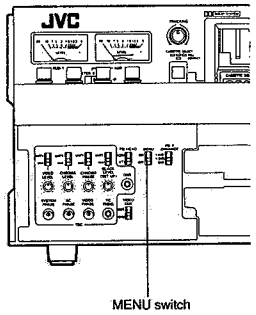
Menu No.		On-Screen Description	Settings		Explanation
			Counter	On-Screen	
SYSTEM	317	9PIN DEVICE TYPE ID	[00] 01 02 03	[JVC SVHS-1] JVC SVHS-2 OTHER TYPE-1 OTHER TYPE-2	Selects device type ID returned from VCR to 9-pin remote control in response to its request. JVC SVHS-1: To return BR-S822E's ID to 9-pin remote. JVC SVHS-2: To return SA-F911E's ID to 9-pin remote. OTHER TYPE-1: To return BVU-800's ID to 9-pin remote. OTHER TYPE-2: To return BVW-75's ID to 9-pin remote.
	318	TC DATA W/O TC BOARD	[00] 01	[TC MISSING] CTL DATA	Selects VCR's response to 9-pin remote control when remote control requests time code data when TC board is not installed. TC MISSING: VCR returns code meaning TC MISSING. CTL DATA: VCR returns substitute CTL data.
	319	TAPE MAX SPEED	[00] 01 02	[X100] X32 X16	Selects maximum tape speed. With C-size cassettes, maximum tape speed is always 14x regardless of the setting. (FF and REW speeds also correspond to this setting. In the 100x mode, playback signal is not output. In the 32x and 16x search modes, playback signal is output.)
	320	PREROLL TIME	00 ⋮ [07] ⋮ 15	0 SEC ⋮ [7 SEC] ⋮ 15 SEC	Selects preroll time in one-second steps from 0 to 15 seconds.
	321	TIME REF. FOR PREROLL	00 [01]	CTL [TC]	Selects time count reference for preroll in TC operation. CTL : Refers to CTL counts. Preroll is possible even when time codes are missing. TC : Refers to time codes.
	322	IN POINT AUTO ENTRY	[00] 01	[NOT ENTERED] ENTERED	Activates or defeats automatic IN point entry function. NOT ENTERED: IN point is not entered automatically by *pressing PREROLL button.* ENTERED: IN point is entered automatically by pressing PREROLL button if no IN point has been previously entered. (Press the COUNTER RESET button to cancel.)
	323	MODE AFTER PREROLL	[00] 01	[STOP] STILL	STOP: Enters Stop mode after preroll is completed. STILL: Enters Still mode after preroll is completed.
	325	CTL COUNTER MODE	[00] 01	[±9H] 24H	±9H: Counter shows from –9 to +9 hours in CTL mode. 24H: Counter shows from 0 to 24 hours in CTL mode.
	326	CTL COUNTER MEMORY	[00] 01	[OFF] ON	OFF: Counter memory function is not available. ON: Enters Stop mode at CTL counter reading of zero in FF and REW modes.
	327	CTL CLEAR AT EJECT	00 [01]	DISABLE [ENABLE]	DISABLE: CTL counter is not reset when cassette is ejected. ENABLE: CTL counter is reset when cassette is ejected.
	332	CASSETTE SEL. INHIBIT	[00] 01	[OFF] ON	OFF: Cassette size selection is possible with the CASSETTE SELECT button on the front panel. ON: Cassette size selection is inhibited.
	333	CF SERVO LOCK REPLY	00 [01]	DISABLE [ENABLE]	Selects information to deliver to 9-pin remote. DISABLE: Colour frame cannot be locked to 4-field colour framing mode (even if locked). ENABLE: Colour frame is locked to 4-field colour framing mode.
	334	CF RE-LOCK AT PLAY	[00] 01	[DISABLE] ENABLE	Activates or defeats colour frame re-lock function when colour frame lock is disengaged in Play mode.

Menu No.		On-Screen Description	Settings		Explanation
			Counter	On-Screen	
TIME CODE	404	TC SOURCE AT REGEN	[00] 01	[LTC] VITC	Selects the type of reference time code in the Regen mode. LTC: Reference code is LTC. VITC: Reference code is VITC.
	405	LTC OUT (REGEN)	[00] 01	[OFF TAPE] TCG	Selects output signal from TIME CODE OUT connector while playback is in progress in Regen mode. OFF TAPE: Outputs time code signal picked up from tape. TCG: Outputs time code signal regenerated by TC generator.
ON-SCREEN	500	ON-SCREEN DISPLAY	00 [01]	OFF [ON]	OFF: No data is displayed on-screen. ON: Data is displayed on-screen.
	501	CHAR. H-POSITION	[00] ⋮ 08	[0] ⋮ 8	Adjusts on-screen VCR data display position in the horizontal direction. 0 : VCR data is displayed at the rightmost position. 1 - 8: Display position shifts to the left with increasing numbers.
	502	CHAR. V-POSITION	[00] ⋮ 09	[0] ⋮ 9	Adjusts on-screen VCR data display position in the vertical direction. 0 : VCR data is displayed at the bottom of screen. 1 - 9: Display position shifts up with increasing numbers.
	503	CHAR. BACKGROUND	[00] 01 02	[BORDER] SEMI. BLACK	BORDER: Displays bordered characters. SEMI.: Displays semi-transparent characters. BLACK : Displays characters on black background.
	504	INFORMATION	00 [01]	TIME [TIME + MODE]	Selects available on-screen information. TIME: Time counter data. TIME + MODE: Time counter data, operation mode, Jog/Shuttle tape speed and Variable-speed Playback/Program Playback tape speed.
TBC	600	TBC FREEZE	[00] 01	[DISABLE] ENABLE	Selects the mode of still pictures in TBC operation. DISABLE: Outputs normal still pictures. ENABLE: Outputs 'freeze' still pictures from TBC's field memory when STILL button is pressed while in Play mode. This is effective only in LOCAL operation.
	601	V BLANK MASK	[00] 01	[OFF] ON	Activates or defeats vertical blanking interval masking function in TBC operation. OFF: No masking function. ON: Masks the entire vertical blanking interval in *playback to erase VITC.* VITC readout is impossible with this setting.
	602	DNR AT NORM. PB	00 [01]	OFF [ON]	Selects DNR operation. Only applicable in normal playback (playback engaged by pressing the PLAY button) with VIDEO OUT select switch set to "NORM" and PB HEAD select switch set to "NORM". OFF: Playback bypass DNR. ON: Playback through DNR. (DNR operation in situations other than the above is as follows: DNR is always ON if the VIDEO OUT select switch is set to "NORM". DNR is always OFF if the VIDEO OUT select switch is set to "EDIT".)
VAR	700	VAR BUTTON	[00] 01	[VAR] P.PLY	Selects the VAR button's function VAR: Variable-speed Playback. P.PLY: Program Playback.

ROM VERSION/HOUR METER DISPLAY

By engaging the Menu Set mode, you can also check the numbers of device ROMs and the hour meter.

1. Set the MENU switch to ON.
   - The set-up menu appears on the monitor screen. The counter display will also switch to the Menu Set mode.
   - The Menu number (000) for the first item will blink.
2. Turn the Jog dial to locate items with numbers in the order of 900.
   - For quicker location, turn the Jog dial counterclockwise.



Counter Display

900---01

901---01

902---01

903-0000

908-0000

909-0000

910-0000

911-0000

On-Screen Display

900:SYSCON ROM Ver.
01
901:MECHACON ROM Ver.
01
902:OPERATION ROM Ver.
01
903:SLOT ROM Ver.
NO CONNECT 00
AVM/OS ROM Ver.
04

908:POWER HOUR METER
0000H
909:DRUM HOUR METER
0000H
910:CAP HOUR METER
0000H
911:REEL HOUR METER
0000H

Menu No.	On-Screen Description	Explanation
900	SYSCON ROM Ver.	Indicates version number of SYSCON ROM.
901	MECHACON ROM Ver.	Indicates version number of MECHACON ROM.
902	OPERATION ROM Ver.	Indicates version number of OPERATION ROM.
903	SLOT ROM Ver.	Indicates version number of SLOT ROM. This item also shows the type of remote control installed in the slot. Available indications are: JVC45PIN (20 on 5th and 6th digits on counter display) RS-232C (21 on 5th and 6th digits on counter display) NO CONNECT (00 on 5th and 6th digits on counter display)
---	AVM/OS ROM Ver.	Indicates version number of AV microcomputer/on-screen ROM.
908	POWER HOUR METER	Indicates the total time (up to 4 digits in hours) the BR-S525E has been powered.
909	DRUM HOUR METER	Indicates the total working time of the drum motor in hours.
910	CAP HOUR METER	Indicates the total working time of the capstan motor in hours.
911	REEL HOUR METER	Indicates the total working time of the reel motors in hours.

CAUTION
The following menu items are for factory use only. Do not change the factory preset.
Menu item #303 WARNING INHIBIT – 00 OFF, #305 REPEAT PLAY — 00 DISABLE, and #306 LONG PAUSE – 01 ENABLE.
The manufacturer is not responsible for any malfunctions caused by changing settings.

WARNING DISPLAY

DIAGNOSTIC CODES

The WARNING display uses numerical codes to indicate various malfunctions and warnings on the counter display. Worded warning messages are provided on-screen. In some cases, power must be turned off before the machine can be recovered. When the AUTO OFF indicator lights, power must be turned on and off again before the machine can be recovered.

	AUTO OFF Indicator	Display code	WARNING (On-Screen Display)	Symptom/Operation
Sensors	YES	01	WARNING 01 LAMP FAILURE	Tape-end sensor LED burns out. The cassette will be ejected. All controls become inoperative.
	YES	02	WARNING 02 CONDENSATION ON DRUM	Moisture condensation on drum and in transport. The cassette is ejected. After ejection, the drum starts rotating and cassettes cannot be loaded until condensation has been eliminated. Do not turn the power off until the AUTO OFF indicator goes out.
	YES	08	WARNING 08 SUP TENSION FAILURE	Slack tape on the supply reel. All controls become inoperative.
Loading Mechanism		32	WARNING 32 FAILURE LOADING	Tape cannot load correctly. Tape unloads and the cassette is ejected. The display turns off when a cassette is inserted again. Normal operation is restored.
	YES	33	WARNING 33 FAILURE UNLOADING	Tape cannot unload. All controls become inoperative.
Cassette Carriage	YES	41	WARNING 41 CASSETTE EJECT FAILURE	Cassette carriage does not lift during tape ejection (even after 3 seconds have passed). All controls become inoperative.
Leader Tape Detection		56	WARNING 56 TAPE DEFECTIVE	Tape beginning and end sensors turn ON during loading because the tape is broken. The cassette is ejected. If the cassette fails to load properly, it may get stuck in the cassette slot. In this case, remove it by hand.The display turns off when an undamaged cassette is inserted. Normal operation is restored.
		57	WARNING 57 END LEADER DETECTION	Tape-end sensor turns ON during loading. Rewind mode is engaged. If the leader tape is detected within 3 seconds, the cassette is ejected. The display turns off when a cassette is inserted again. Normal operation is restored.
		58	WARNING 58 BEGIN LEADER DETECTION	Tape-beginning sensor turns ON during loading. FF mode is engaged. If the leader tape is detected within 3 seconds, the cassette is ejected. The display turns off when a cassette is inserted again. Normal operation is restored.

	AUTO OFF Indicator	Display code	WARNING (On-Screen Display)	Symptom/Operation
Rotating System	YES	70	WARNING 70 DRUM MOTOR FAILURE	Drum motor stops. All controls become inoperative. Recovers when a cassette is inserted again.
	YES	71	WARNING 71 CAP MOTOR FAILURE	Capstan motor stops. All controls become inoperative. Recovers when a cassette is inserted again.
	YES	72	WARNING 72 SUP REEL MOTOR FAILURE	Supply reel rotates abnormally. All controls become inoperative. Recovers when a cassette is inserted again.
	YES	73	WARNING 73 TU REEL MOTOR FAILURE	Take-up reel rotates abnormally. All controls become inoperative. Recovers when a cassette is inserted again.
Others	YES	04	WARNING 04 REEL SERVO FAILURE	Power supply to reel tension servo stops. All controls become inoperative.

Cassette insertion is not possible if the cassette slot remains open after cassette ejection. In this case, press the EJECT button to close the slot door, and insert the cassette again.

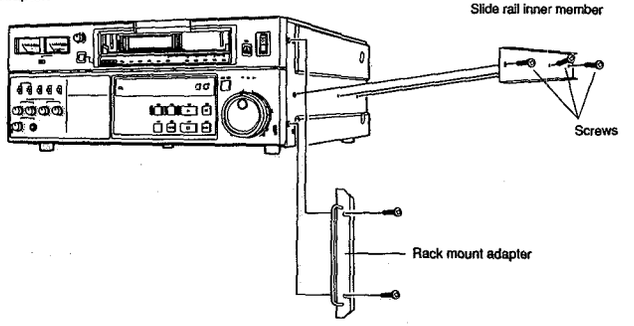
INSTALLATION

RACK MOUNTING

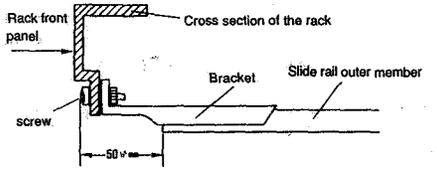
Using the optional SA-K63UB Rack Mount Adapter, you can install the BR-S525E in a 19" EIA-standard rack.

- Use a complete slide and bracket unit such as the Accuride slide and bracket unit (Part No. C-2038-22/BK-2038).
- For more details, consult your local JVC service agent.

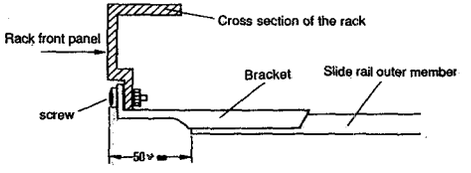
1. Attach the inner members of the slide rails with screws as illustrated. (Screws should be no more than 8 mm long.)
2. Attach the SA-K63UB rack mount adapter.



3. Attach the right and left brackets and outer members of the slide rails to the rack.
   - When installing the bracket at the back of the rack's panel surface.



   - When installing the bracket at the front of the rack's panel surface.



* Adjust the distance between the front panel and the slide rail to between 50 and 55 mm.

4. Check that the unit slides in and out smoothly.

NOTE:

- The rack mount adapter handle is only for sliding the unit. Do not carry the unit holding the handle.

TEST POINTS

The output signals from the Hi-Fi audio heads and video heads are available at the front panel test points. Connect an oscilloscope to these test points to check the BR-S525E's performance and condition.

Connection	Items to be checked	Standard waveform
Hi-Fi audio head output V-RF → To input terminal of oscilloscope A-RF → To external trigger terminal of oscilloscope D-PULSE → To ground terminal of oscilloscope GND	• Tape-to-head contact • Tape running stability • Inferior RF after head replacement	• "+" triggered CH-1 CH-2
Video head output V-RF → To input terminal of oscilloscope A-RF → To external trigger terminal of oscilloscope D-PULSE → To ground terminal of oscilloscope GND Use a 10:1 probe	• Compatibility of tape pattern • Tape-to-head contact • Tape running stability • Tracking • Abnormality in RF	• "+" triggered CH-2 CH-1

CONNECTOR SPECIFICATIONS

9-Pin Remote Connector

Pin No.	Signal
1	GND
2	TRANS A
3	RECEIVE B
4	GND
5	—
6	GND
7	TRANS B
8	RECEIVE A
9	GND

Y/C 443 7-Pin Connector

Pin No.	Signal
1	Y SIGNAL
2	GND (Y SIGNAL)
3	—
4	—
5	C SIGNAL
6	GND (C SIGNAL)
7	—

XLR 3-Pin Connector

Pin No.	Signal
1	GND
2	COLD
3	HOT

15-Pin TBC Remote Connector

Pin No.	Signal
1	FG
2	+12V
3	GND
4	VIDEO LEVEL
5	CHROMA LEVEL
6	CHROMA PHASE
7	SET UP LEVEL
8	RSVD DC 1
9	RSVD DC 2
10	REMOTE EN
11	FREEZE EN
12	RSVD CTL 1
13	RSVD CTL 2
14	OPERATE
15	GEN LOCK

Y-686/924 7-Pin Output (option)

Pin No.	Signal
1	Y SIGNAL
2	GND (Y SIGNAL)
3	—
4	—
5	C SIGNAL
6	GND (C SIGNAL)
7	COLOUR FRAME PULSE

SPECIFICATIONS

GENERAL

Format : VHS/S-VHS Europe standard
Power consumption : 120 W
Power requirement : AC 110 – 127 V/220 – 240 V∿, 50/60 Hz
Dimensions : 42.9 (W) X 18.8 (H) X 56.5 (D) cm
Weight : 23 kg
Operating temperature : 5°C to 40°C
Storage temperature : –20°C to 60°C
Tape speed : 23.39 mm/sec
Playback time : Max. 180 min. with JVC SE-180/E-180
Fast forward/Rewind time : Less than 2.5 min. for 180 min. tape

VIDEO

Playback : Rotary two-head helical scanning system
Luminance : FM recording
Colour signal : Phase shift, converted sub-carrier direct recording
Video signal system : PAL-type colour signal/PAL-type Y/C signal
Output
- Line : 1.0 Vp-p, 75 ohms, unbalanced
- Y/C 443 : Y: 1.0 Vp-p, 75 ohms, unbalanced
  C: 0.3 Vp-p, 75 ohms, unbalanced (Burst)

Signal-to-noise ratio : More than 46 dB (S-VHS)
(With normal heads, VIDEO OUT select switch : "NORM", DNR : "OFF")
Improvement by DNR : Luminance : 5.0 dB (max.)
Chroma AM : 10.0 dB (max.)
PM : 9.5 dB (max.)
(When the S/N ratio of the input signal is around 40 dB, the S/N ratio is improved by the levels shown above.)
Horizontal resolution : More than 400 lines (S-VHS)
More than 250 lines (VHS)
Reference video input
- Black burst or Composite video (colour bar) : 0.45 Vp-p, 75 ohms, unbalanced
  1.0 Vp-p, 75 ohms, unbalanced (loop-through with 75-ohm terminating switch)

AUDIO

Output
- Line : –6/0/+4 dBs, Low impedance, balanced (Hi-Fi/Normal)
- Monitor : –6 dBs, Low impedance, unbalanced
- Phones : ∞ to –17 dBs, 8 ohms

Signal-to-noise ratio : More than 43 dB (NR-off, Normal at 3% distortion)
Dynamic range : More than 87 dB (Hi-Fi)
Frequency response : 20 to 20,000 Hz (Hi-Fi)
40 to 12,000 Hz (Normal)
Wow & flutter : Less than 0.005% WRMS (Hi-Fi)
Less than 0.3% RMS (Normal)

TIME CODE

Output : 0 dB ± 3 dBs, Low impedance, unbalanced

CONNECTORS

Video
- Line output : BNC-type connectors
- Y/C 443 output : 7-pin connectors
- Monitor : BNC-type connector

Audio
- Hi-Fi output : XLR connectors
- Normal output : XLR connectors
- Monitor : RCA connector

Remote control : 9-pin connector
TBC remote : 15-pin connector

Design and specifications subject to change without notice.